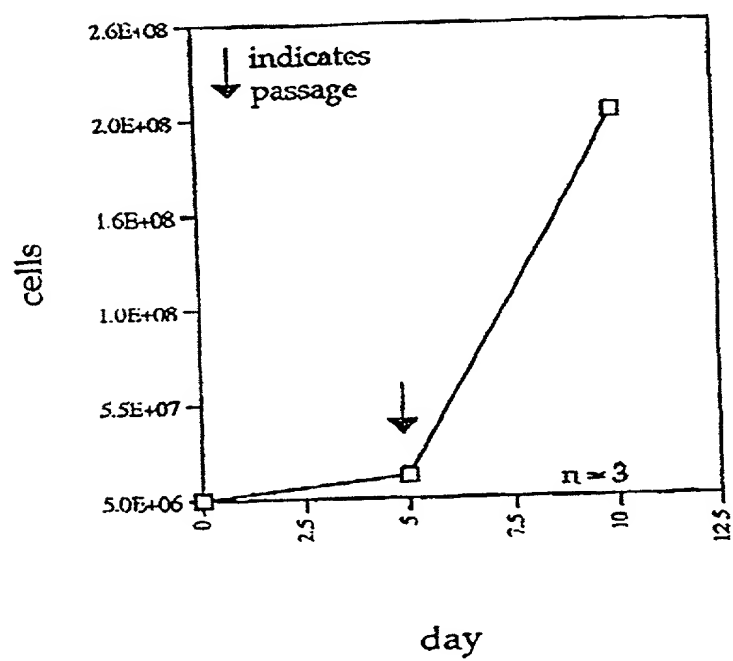


## CEC Expansion after Cryopreservation



HFVIII/SQ/egfp, HF8SQgfp.gp, original HB- with B-domain SQ insert based on Lind et al, Eur J Biochem, 232, p21 primer sequence, containing eGFP protein sequences

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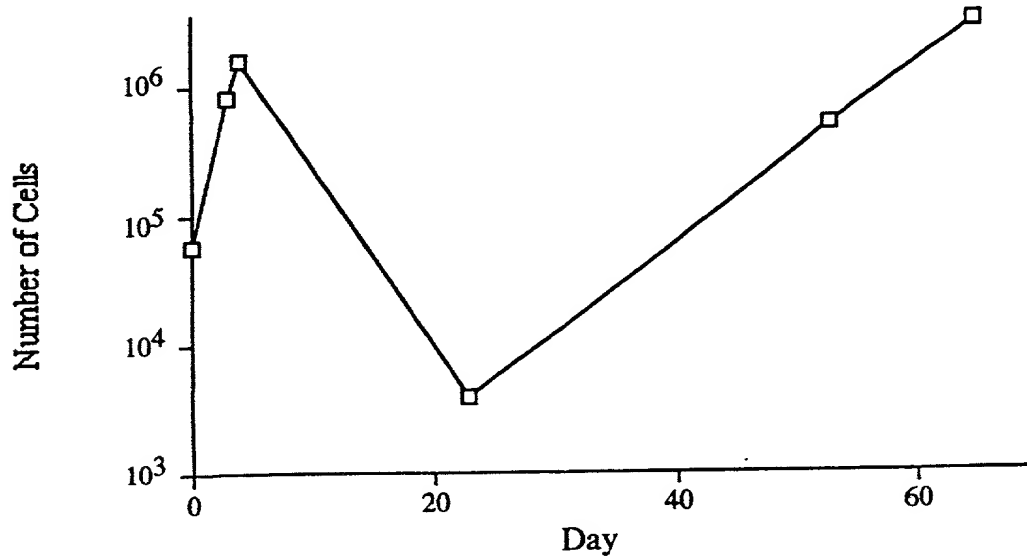
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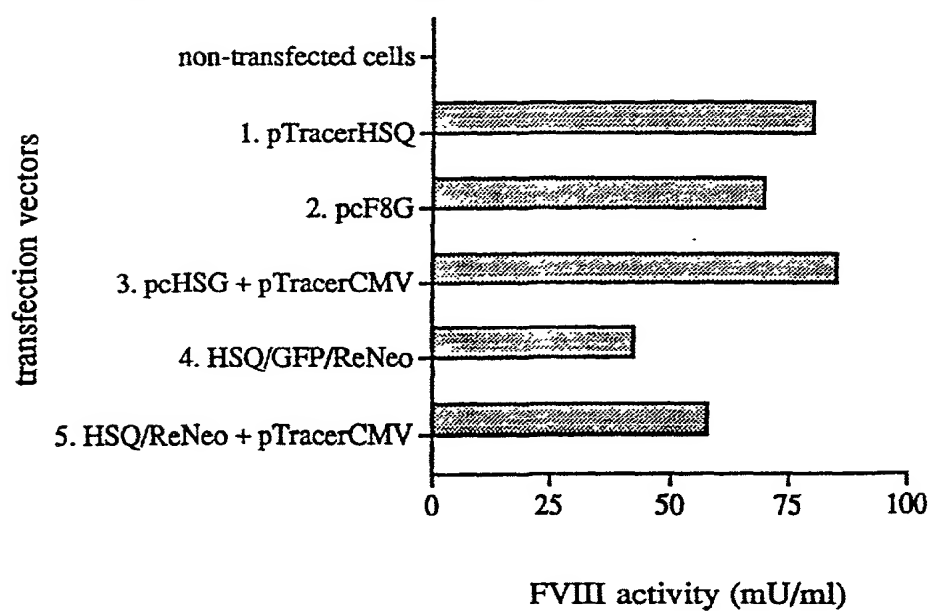
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 TGCCGGCAGCGCTCTGGGTCATTTTCGGCGAGGACCGCTTTCGCTGGAGCGCGACGATGATCGG  
 CCTGTGCTTGCGGTATTTCGGAATCTTGCACGCCCTCGCTCAAGCCTTCGTCAGTGGTCCCGCC  
 ACCAAACGTTTCGGCGAGAAGCAGGCCATTATCGCCGCGCATGGCGGCGGACGCGCTGGGCTACG  
 TCTTGCTGGCGTTTCGCGACGCGAGGCTGGATGGCCTTCCCCATTATGATTCTTCTCGCTTCCGG  
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 CGGGCATTTATGCGCGCTCGGCGAGCACATGGAACGGGTGGCATGGATTGTAGGCGCGCGCTT  
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 GAAGCCGCGCGCACCTCGCTAACGGATTCACTCACTCCAAGAATTGGAGCCAATCAATTCTTGCG  
 GAGAACTGTGAATGCGCAACCAACCTTGGCAGAACATATCCATCGCTCCGCGCATCTCCAGC  
 AGCCGCGACGCGCGCATCTCGGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGAC  
 GAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACC  
 AGGCGTTTTCCCCCTGGAAGCTCCCTCGTGCCTCTCCTGTTCCGACCCTGCCGCTTACCGGATA  
 CCTGTCCGCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCAATGCTCACGCTGTACCTATCTC  
 AGTTCGGTGTACCTCGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCGTTTCAGCCCGACC  
 GCTGCGCTTATCCGGTAACCTATCGTCTTGAAGTCCAACCCGGTAAGACACGACTTATCGCCACT  
 GGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTG  
 AAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGC  
 CAGTTACCTTCGGAAGAGATTGGTAGCTCTTGATCCGGCAAACAACCCAGCTGGTAGCGG  
 TGGTTTTTTTGTGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTG  
 ATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAACTCACGTTAAGGGATTTTGGTCATGA  
 GATTATCAAAAAGGATCTTACCTAGATCCTTTAAATTAAAAATGAAGTTTAAATCAATCTA  
 AAGTATATATGAGTAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCA  
 GCGATCTGTCTATTTTCGTTTCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATAC  
 GGGAGGGCTTACCATCTGGCCCCAGTGTGCAATGATACCGCGAGACCCACGCTCACCAGGCTCC  
 AGATTTATCAGCAATAAACAGCCAGCCAGAAGGGCCGAGCGCAGAAGTGGTCTGCAACTTTA  
 TCCGCTCCATCCAGTCTATTAATTGTTGCCGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATA  
 GTTTGCGCAACGTTGTTGCCATTGCTGCAGGCATCGTGGTGTACGCTCGTCTGTTTGGTATGGC  
 TTCATTAGCTCCGTTTCCCAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAA  
 GCGGTTAGCTCCTTCGGTCTCCGATCGTTGTCAGAAGTAAGTTGGCCGAGTGTATCACTCA  
 TGGTTATGGCAGCACTGCATAATTCTCTTACTGTGTCATGCCATCCGTAAGATGCTTTTCTGTGAC  
 TGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCG  
 GCGTCAACACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGTCTCATCTTGGAAAAA  
 GTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTGAGATCCAGTTCGATGTAACCCAC  
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 GGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTCATACTCT  
 TCCTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTTGA  
 ATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTGAC  
 GTCTAAGAAACCATATTATCATGACATTAACTATAAAAAATAGGCGTATCACGAGGCCCTTTC  
 GTCTTCAA\*



Morphology & fluorescence of PLE9  
transduced cells at day 53.

**ELISA of FVIII in conditioned media from transfected cells**

**ELISA of FVIII in conditioned media from transfected cells**